

## Abstract

5 A FET mixer uses a balun having a primary and secondary, with the primary coupled to an <sup>radio</sup>Radio frequency signal input. The mixer also includes a pair of field effect transistors (FETs), wherein the gates are coupled to one another and to a local oscillator input. One of the source and the drain of the second of the two transistors is coupled at a node to one of the source and the drain of the other of the two

10 transistors, and the node is coupled to ground. The other of the source and the drain of the first of the two transistors is coupled to one side of the secondary of the balun and the other of the source and the drain of the second of the two transistors is coupled to the other side of the secondary of the balun. An intermediate frequency signal output is coupled to a point in the circuit path between the first and second transistors.

~~01920/00101118529.1~~

**09-07-2016**